Operating instructions

Canberra CM 84

QuickOut a

QuickOut b

PROG
FR   FF

92.1
FM III 6 dx
        lo

BLAUPUNKT
CANBERRA CM 84

SCAN   CODE

DMS   DISC MANAGEMENT SYSTEM

DSC GEO M · L CPS MTL DD RM lo MIX PS

1 2 3 4 5 6

19 18 17 16 15 14 13 12 11 10 9 8 7

3
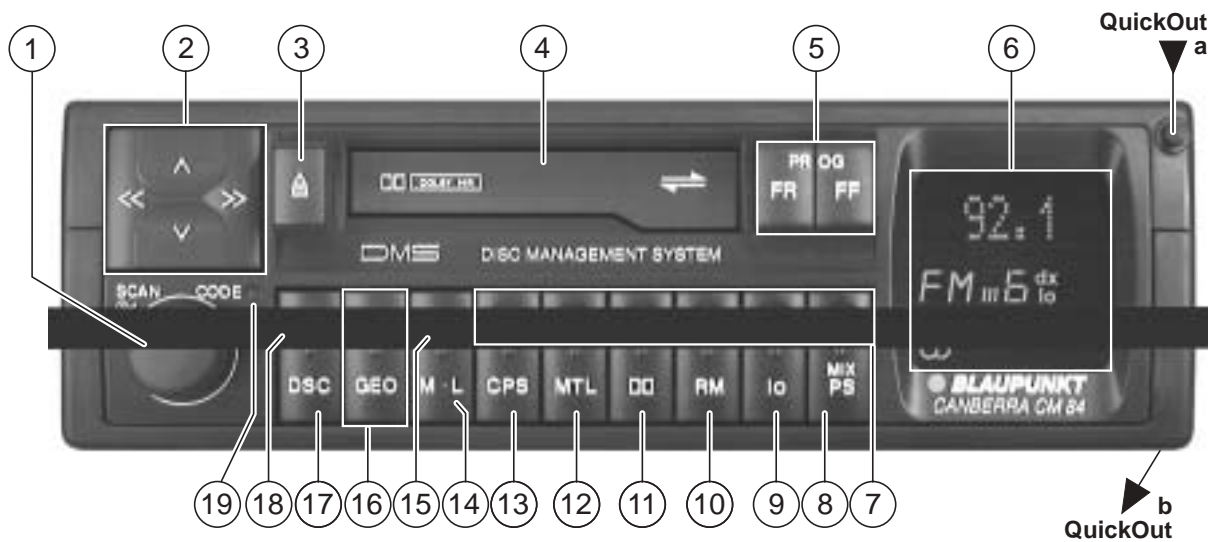
Table of Contents

Short description

① **Amplifier**

On ↷ Off ↶

Volume ↗↘
Scan: Press for 1 second

When "CODE" lights up in the display, read chapter "Anti-theft coding" first.

SCAN
Hold down for approximately 1 second to sample all stations to be received.

② **Rocker switch**

Seek tuning

up

down in
short steps

up in
short steps

down
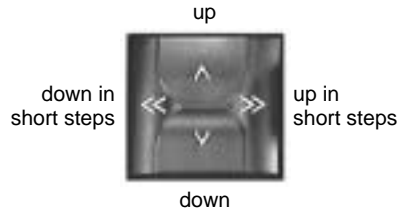
Extra functions:
DSC mode: Select and program DSC settings.
Coding: Enter code and confirm with ∧

③ **Eject tape**
Press ⏏ .

④ **Cassette slot**
Insert tape (side A or 1 facing up, the open side facing to the right).

⑤ **Fast winding/Autoreverse**

Changing the track
Press simultaneously
TR1-PLAY or TR2-PLAY in the display

Fast rewind
To stop:
press FF

Fast forward
To stop:
press FR

⑥ **Display**
Radio:

Waveband
Frequency

Memory bank
Preset button
Seek tuning sensitivity

Stereo

17

Cassette:

Side 1 or 2

Repeat or skip titles

Metal/CrO_2

Dolby

Radio reproduction during rapid tape run

CD changer (option):

Title no.

CD no.
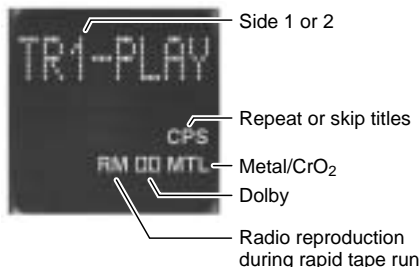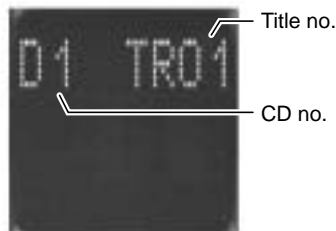
⑦ **1, 2, 3, 4, 5, 6 - preset buttons**
You can store 6 stations on each FM memory bank (I, II, III and T) and another 6 stations on MW and LW each.
To store a station: Press button during radio operation and hold it down until the radio resumes play again.
To recall a station: Select a waveband. For FM stations, also select the desired memory bank by pressing FM•T as many times as required. Then press the corresponding preset button.

Extra function:
Coding - Read chapter "Anti-theft coding" first.
Buttons **1, 2, 3, 4** - To enter the four-digit code.
Press each button repeatedly until the four-digit code given in the car radio passport is displayed.

⑧ **MIX/PS**
MIX:
→ CD changer control
PS (Preset Scan):
To briefly sample all stored stations of the selected waveband; for FM stations on the memory banks FM I-III or T.

⑨ **lo**
Seek tuning sensitivity
lo lit up in the display indicates normal seek tuning sensitivity (the system will pick up strong stations only).
dx lit up in the display indicates high seek tuning sensitivity (the system will also pick up weaker stations).
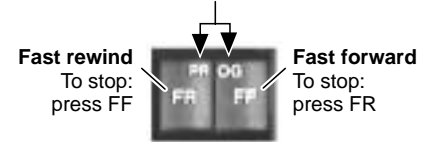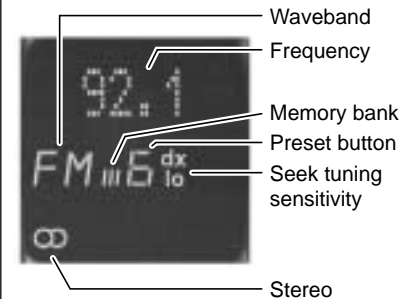**To change the seek tuning sensitivity:** press lo.

⑩ **RM** (**R**adio **M**onitor)
Use this button to listen to the radio during fast winding.

⑪ **⑴⑴ – Dolby NR***
This set allows you to play cassettes recorded with Dolby-B noise reduction.
To switch Dolby-NR on/off:
Press the button.
* Noise reduction system manufactured under license from Dolby Laboratories. "DOLBY" and the double-D symbol are trademarks of Dolby Laboratories.

⑫ **MTL**
For optimal reproduction of metal and CrO_2 tapes.
To switch MTL on/off:
Press the button.

⑬ **CPS**
To repeat or skip cassette titles.
To switch CPS on/off:
Press the button.

⑭ **M•L**
To select MW or LW. Press button if required.

⑮ **FM•T - FM, Travelstore**
To select one of the FM memory banks I, II, III or "T" (**T**ravelstore).
To change the memory bank:
Press button until the desired memory bank is indicated on the display.

To store the six most powerful stations automatically with Travelstore:
Store: Press **FM•T** until seek tuning starts (see display).
Recall: Press **FM•T** until "T" appears on the display. Then briefly press one of the presets **1, 2, 3, 4, 5, 6**.

⑯ **AUD/GEO**
AUD –
To switch the loudness on and off.

• Press AUD for approximately 2 seconds. When the Loudness is on, the display shows "LD". For more information see chapter "DSC programming".
To adjust the treble and bass frequencies using the rocker switch.

Treble
+
Bass **–** ‹‹ ›› **+** Bass
–
Treble
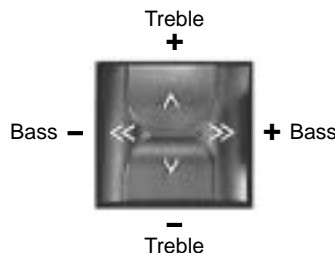
GEO –
To adjust the BALANCE (left/right) and FADER (front/rear).

Fader front
Balance left ‹‹ ›› Balance right
Fader rear
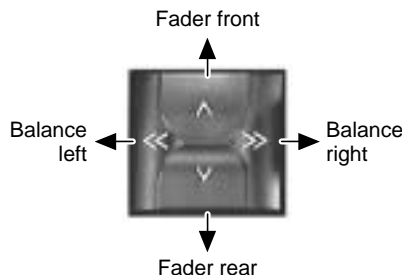
To modify a setting,
• press AUD or GEO first and then change the setting using the rocker switch.
The adjusted value is shown in the display.
The last setting will be stored automatically.
If the setting remains unchanged within 8 seconds, the display will shift back to the previous condition.

⑰ **DSC** (**D**irect **S**oftware **C**ontrol)
Use the DSC function to adjust a number of programmable default settings to your personal needs. See "DSC programming" for more details.

⑱ **SRC** (**S**ou**rc**e)
To select between the connected audio sources, e.g. cassette, radio, or CD changer (option).

⑲ **Security LED (code-LED)**

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Important information

What you must know!

Before starting to use your new car radio, you should carefully read through the information on "Traffic safety" and "Anti-theft coding".

Traffic safety

As the driver of a motor vehicle, it is your responsibility to pay attention to the traffic situation at all times. Never use your car radio in a way that could distract you.

Please keep in mind that you travel a distance of 14 m per second at a speed of only 50 km/h.

Should the traffic situation become particularly demanding, we would advise you not to use the radio.

When adjusting the volume, make sure that you are still able to hear all sounds coming from outside of the vehicle, so that you are always able to react to warning signals, for example from the police or the fire brigade.

QuickOut

With the QuickOut handle you can easily pull your radio out of the installation compartment and take it along with you. The preset stations remain stored for a longer time.
To take out the radio,

- press knob (a), raise the handle (b) and pull the unit out.

To listen to the radio or cassette again,

- push the set into the compartment until it stops and move the handle back to the front panel.

If the coding system is off, your set will be ready for operation.

If the coding system is on, each time the set is re-inserted into the compartment, you'll have to proceed as described under "First-time operation and restart ...".

CD changer (option)

This set allows you to control one of the following Blaupunkt CD changers: CDC-A03, CDC-F03.

Please contact your specialised dealer for more information on these units.

Go through section "CD changer control" for more information on how to control the individual functions.

Installation/hook-up

If you like to install your new car radio by yourself or add other audio components to the existing ones, then please read carefully the enclosed instructions on installation and hook-up.

Anti-theft coding

Normally, all car radios are delivered with the theft protection being on.
Exception:
With QuickOut sets, the code protection is deactivated, so that the radio will be ready for operation as soon as it is inserted into the compartment.
If the anti-theft coding system is on while the power supply to the unit is interrupted (e.g. theft, disconnecting the car battery or prior to installation), the set is electronically blocked. Then it may only be used again after the appropriate code number has been re-entered (see car radio passport).

Wrong code number entered

It should not be possible for thieves to ascertain the code number by trial-and-error. This is why the set will be blocked for a certain period of time if an incorrect code number is entered. In this case, "- - - -" will appear on the display.
This waiting time is 10 seconds after the first three attempts, and 1 hour following subsequent attempts.
After 19 unsuccessful attempts, "OFF" will appear on the display and you can no longer restart the set.

Note:
Keep you car radio passport with the code number in a safe place in order to avoid "unauthorized access" to your car radio.
If you lose your radio passport and have forgotten your code number, you will not be able to restart the set after the power supply has been interrupted. In this case, your radio can only be made operable again by our central customer service workshop or by one of our service agencies abroad.

First-time operation and restart following interruption of power supply

• Switch on the set.
  "CODE" will appear on the display.

• Briefly press preset button **1** ⑦, "0000" will appear on the display.

• Enter the code number given in the Blaupunkt car radio passport:

Example: the code number is 2521.
  - Press preset button **1** twice, "2000" appears on the display.
  - Press preset button **2** five times, "2500" appears on the display.
  - Press preset button **3** twice, "2520" appears on the display.
  - Press preset button **4** once, "2521" appears on the display.

• To confirm the code number:
  Press the upper part of the rocker switch ∧ ②.
Your car radio is now ready for operation.

If four dashes again appear on the display, you have entered a wrong code number. Now it is essential to enter the correct code after the waiting period has elapsed (CODE on the display).
If the set is switched off during the waiting period, the waiting period commences anew after switching the set on.

Switching the code system off

• Turn off the radio.

• Simultaneously press preset buttons **1** and **4** and hold them down.

• Turn on the set again. "CODE" will appear on the display.

• Enter the code number given in the Blaupunkt car radio passport and confirm:
  See example "First-time operation ...".
The anti-theft coding system is now deactivated.

Radio operation

Switching the code system on again

To re-activate the anti-theft coding system:

- Turn off the radio.
- Simultaneously press preset buttons **1** and **4** and hold them down.
- Turn on the set again.
  "CODE" briefly appears on the display before the set is switched on.
- Release preset buttons **1** and **4** again.

The anti-theft coding system is now activated.

Whenever the set is turned on now, "CODE" will always appear briefly on the display.

Optical indication of theft protection

When you leave your car, you can let a security LED flash in order to show that your radio is theft-protected.

Depending on how you have hooked up your radio, three different LED modes are available, which can be programmed with the DSC function.

See "DSC programming - security LED" for more details.

Selecting a waveband

You can select one of the following three wavebands:
FM 87.5 - 108 MHz,
MW 531 - 1602 kHz and
LW 153 - 279 kHz.

- Select the desired waveband using the **FM•T** or **M•L** button.

To switch between AM and LW,

- press the **M•L** button.

Automatic seek tuning ∧/∨

- Press ∧/∨. The radio will automatically tune into the following station.

If you keep the upper or lower part of the rocker switch ∧/∨ depressed, seek tuning speeds up in upwards or downwards direction.

Seek tuning

up

down in short steps

up in short steps
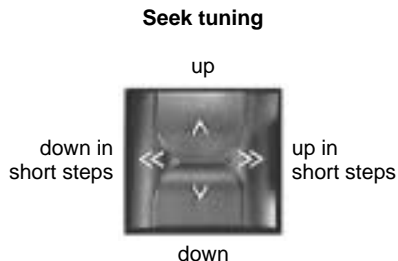
down

Manual seek tuning << >>

- Press << or >> to change the frequency in small steps in upwards/downwards direction.

Hold down the right or left part of the rocker switch to speed up this procedure.

Adjusting the seek tuning sensitivity

The set allows you to modify the seek tuning sensitivity.

If "**lo**" lights up, the radio will only pick up strong stations (low sensitivity).

If "**dx**" lights up, the radio will also pick up less powerful stations (higher sensitivity).

To change the seek tuning sensitivity,

- press **lo**.

On top of this, the sensitivity levels can be adjusted separately for lo and dx (see chapter "DSC programming").

Stereo - mono switch (FM)

You can switch to mono when the reception quality becomes poor:

- Press **lo** for approximately 2 seconds. During mono reception the stereo symbol ⬭ on the display will go out.

Each time the car radio is switched on, the radio will automatically be set to stereo reception.

It will automatically shift to mono when the reception quality becomes poor.

Changing the memory bank (FM)

You can shift between the memory banks I, II, III and T to store and recall preset stations. The selected memory bank is indicated on the display.

- Press **FM•T** until the desired memory bank lights up on the display (press repeatedly if necessary).

Storing stations

Using the preset buttons **1, 2, 3, 4, 5, 6** you can store six stations on each FM memory bank (I, II, III, T).
On MW and LW, you can store six stations each.

- Select the waveband by pressing **FM•T** or **M•L**. To store FM stations, press the **FM•T** button to select one of the FM memory banks.
- Use the rocker switch to tune to a station (either automatically or manually).
- Press the desired preset button and hold it down. The radio will be muted and resumes play after approximately 2 seconds. The system will also send out a beep tone.

Now the station is stored.
The activated preset button is indicated on the display.

Note:
If you tune into a station which has already been stored, the corresponding preset button and the memory bank will start flashing on the display for a short while.

Storing the strongest stations automatically with Travelstore

You can use the Travelstore memory bank to automatically store the six strongest FM stations sorted on the preset buttons according to their signal strength. This feature is especially useful when travelling, because it will always give you the most powerful stations at a fingertip as you pass through the various reception areas.

- Press **FM•T** for at least 2 seconds.

The radio will seek the most powerful FM stations and store them on the "T" memory bank (Travelstore). As soon as this procedure has finished, the first station will be played. FM stations can also be stored manually on the Travelstore bank (see "Storing stations").

Recalling stored stations

You can recall any stored station by pressing the corresponding preset button.

- Use the **FM•T** or **M•L** button to select a waveband. Select the desired memory bank to recall FM presets.
  For this purpose, press **FM•T** until the desired memory bank is indicated on the display.
- Briefly press the corresponding preset button.

Sampling stored stations briefly
with **P**reset **S**can

You can briefly sample all preset stations of a memory bank using the Preset Scan function.

On FM, you can let the system sample the stations stored on the Travelstore level or on the three other memory banks.

- Select a waveband.
- On FM, press the **FM•T** button to choose the desired memory bank.

To start Preset Scan:

- Press **PS**.

To continue listening to a sampled station/switch Preset Scan off:

- Press **PS** once again.

Sampling stations briefly
with Radio Scan

This function allows you to sample all stations of the adjusted waveband for approximately 8 seconds each.

To activate Scan:

- press knob ① for approximately 1 second.

  The next station received will be briefly sampled. The frequency of that station flashes on the display. Following this, the next station is searched for. This procedure is repeated until the entire frequency band has been scanned.

To continue listening to a sampled station/switch Radio Scan off:

- briefly press knob ①.

If no station is selected during the search operation, the scan function will be automatically switched off after the entire frequency band has been passed through. The radio will then return to the initial station that was being played when the scan function was activated.

Tape operation

Inserting a tape

- Turn on the set.
- Insert a tape.

Eject tape   Insert tape with side A or 1 facing up, the open side facing to the right

The tape will be played in the direction used last.

If TR1-PLAY is displayed, this means that track 1 or A of the tape is played.

Ejecting a tape

- Press ⏏ .
  The cassette will be ejected.

Fast winding

Fast forward

- Press **FF** (fast forward).
  At the end of the tape, the set will switch to the other track and start playing it.
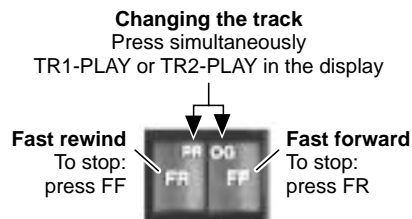
To stop fast forward:

- press **FR**.

Fast rewind

- Press **FR** (fast rewind).
  When the tape has been completely rewound, the set will start playing the same track again.

To stop fast rewind:

- press **FF**.

Changing the track
Press simultaneously
TR1-PLAY or TR2-PLAY in the display

Fast rewind
To stop:
press FF

Fast forward
To stop:
press FR

Autoreverse

If, while a tape is playing, you wish to switch to the other track of that tape:

- press **FR** and **FF** simultaneously.

At the end of the tape, the set will automatically switch to the other track. The display will show TR1-PLAY for track 1 or A and TR2-PLAY for track 2 or B.

Note:

If there is too much tension on the tape during playback, the set may switch to the other track by itself. In this case check the condition of the tape. Sometimes it helps to rewind the cassette tape completely.

Tape selection with MTL

Press the MTL button for optimal reproduction when using metal or CrO_2 tape. "MTL" will then light up on the display.
To switch the function on/off:

- Press MTL.

Dolby B-NR*

With this set you can play cassettes recorded with or without Dolby-B noise reduction. Cassettes recorded with Dolby NR* distinguish by their reduced background noise and the improved dynamic characteristics.
To switch Dolby on/off:

- press ▭▭. When Dolby is on, ▭▭ is indicated on the display.

* Noise reduction system manufactured under license from Dolby Laboratories. "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.
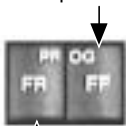
Skipping/repeating titles
with CPS

CPS stands for **C**assette **P**rogram **S**earch. This function allows you to skip a title or listen to a title once again.
To switch the function on/off:

- press CPS.

When the function is on, "CPS" lights up on the display.

Fully depress button -
the tape is fast forwarded to the next title.

Fully depress button -
the tape is rewound to the beginning of the
currently played title, when this title
has already been played for more than
8 seconds. If not, the tape will be rewound
to the beginning of the previous title.

Listening to the radio during fast winding
with RM (**R**adio **M**onitor)

When the tape is fast forwarded or rewound,
the radio is normally muted. To listen to the
radio during fast winding (also with CPS):

• press **RM**. "RM" lights up on the dis-
play.

Changing the audio source
with SRC

When you have inserted a cassette, you can
change between tape or radio reproduction.
To switch over,

• press the SRC button.

Care of your audio equipment

We recommend that you use only C-60/C-90
cassette tapes in your car radio. Protect your
cassettes from dirt, dust and temperatures
exceeding 50 °C. During cold weather, allow
cold cassettes to warm up somewhat before
playing them in order to avoid uneven tape
transport. Operating problems and sound
distortions may occur after approximately
100 hours of playing time and are caused by
dust particles which adhere to the rubber
roller and the audio head.
Use a cleaner cassette to remove normal dirt
build-up. For tougher cases, use a cotton
swab (Q-tip) soaked with alcohol. Never use
any hard tools to clean your unit!

DSC programming

This car radio offers **d**irect **s**oftware **c**ontrol
(DSC) to adjust a number of default settings
to your personal needs and store them.
Listed below you will find an overview of such
default settings.
To change a setting,
• press **DSC**.
Then use the rocker switch to select the
functions described in the following and chan-
ge the respective value. The current conditi-
on is indicated on the display.
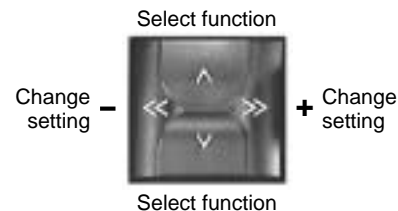
LOCAL   Seek tuning sensitivity for
         local reception
         LOCAL 1 - high sensitivity
         LOCAL 3 - low sensitivity

DIS   Seek tuning sensitivity for
         distant reception

         DIS. 1 - high sensitivity
         DIS. 3 - low sensitivity

COLOUR To match the display colour to the dashboard illumination. Select orange or green.

LOUD Loudness - to boost the less perceptible, deeper tones for a more natural sound impression.

LOUD 0 - no boost
LOUD 6 - strong boost

BEEP Acknowledgement tone for functions requiring a push of more than 2 seconds. Adjust the volume of that tone between 0 and 9 (0 = OFF).

CODE-LED To select the LED mode for optical theft protection.

LED1 - LED only flashes if the car is switched off via the ignition.
LED2 - LED always flashes if the car radio is switched off.
LED 0 - No flashing.

To leave the DSC mode/store the setting,
• press DSC.

Survey of DSC default settings

LOCAL   : 1
DIS   : 1
COLOUR   : orange
LOUD   : 5
BEEP   : 5
CODE-LED : 2

CD changer control (option)

With this set you can control the following Blaupunkt CD changers: CDC-A03, -F03.

Starting CD changer operation
with **SRC** on the car radio

It is necessary that the changer is fitted with a magazine.
Use the **SRC** button to switch between the connected audio sources (radio - changer - cassette).
Press **SRC** until the changer functions appear on the display,
e.g. **D**1 - **TR** 01
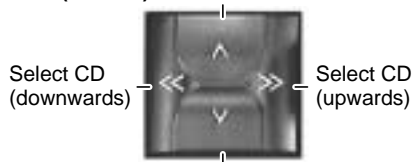**D** = disk, **TR** = track (title).

Title no.

CD no.

27
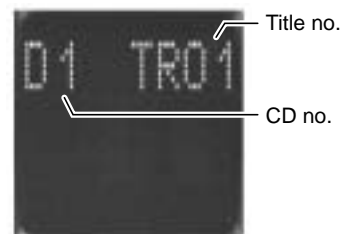
Selecting a CD/title with the rocker switch

Select title (upwards): press briefly
CUE (audible): hold down

Select CD
(downwards)   Select CD
                     (upwards)

Restarting a title: press briefly
Select title (downwards): briefly press
as many times as required
REVIEW (audible): hold down

The display shows you the current condition.

SCAN

To briefly sample all CD tracks.
To start SCAN:

• press the SCAN knob on the car radio
  for approximately 1 second.
  The titles will be briefly played one after
  another in ascending order.

To cancel SCAN:

• briefly press SCAN once again. The
  currently sampled track will continue to
  play.

MIX

This function allows you to play the tracks of
the selected CD at random.
When all tracks of a disc have been played,
the system starts playing the following CD of
the magazine, whereby the MIX function
remains active.

To start MIX:

• press the MIX button briefly.

To cancel MIX:

• press the MIX button briefly.

Note:
It might happen in exceptional cases that the
changer shows malfunctions caused by vol-
tage drops.
Should this happen, turn the car radio off and
on again.
The changer will then return back to normal
operation.

Appendix

Technical data

Amplifier:

Output power:	4 x 19 W or 2 x 24 W RMS acc. to DIN 45324/3.1 4 x 20 W or 2 x 25 W music acc. to DIN 45324/3.2

FM:

Sensitivity:	1.0 µV at 26 dB signal-to-noise ratio
Frequency response:	35 - 15,000 Hz (-3 dB)

Cassette:

Frequency response:	32 - 16,000 Hz (-3 dB)

Subject to modifications!

Blaupunkt-Werke GmbH
Bosch Telecom